

REMARKS

Claims 1, 3-10, 12-19 and 21-27 are pending in this application. By this Amendment, claims 9, 18, 19 and 23-27 are amended for clarity. No new matter is added by this Amendment.

I. Rejection Under 35 U.S.C. §102(e)

Claims 1, 3-10, 12-19, and 21-27¹ are rejected under 35 U.S.C. §102(e) over U.S. Patent No. 6,342,892 B1 (Van Hook). This rejection is respectfully traversed.

A. Van Hook Does Not Anticipate the Subject Matter of Independent Claims 1, 5-8, 10, 14-17, 19 and 23-26

Van Hook discloses a three dimensional (3D) video game system that projects a 3D world onto a two dimensional viewing plane. Van Hook also discloses a frame buffer 118 that is double buffered, meaning that it is sized to contain two complete television screen images (col. 45, lines 47-49), and also meaning that coprocessor 200 can be writing the "next" image into half of the frame buffer while the video interface is reading out the other half (col. 9, lines 44-47).

Each of independent claims 1, 5-8, 10, 14-17, 19 and 23-26 recite "an intermediate buffer drawing section which temporarily draws an image of a geometry-processed object in an intermediate buffer in place of drawing the image in a frame buffer; a frame buffer drawing section which draws the image of the geometry-processed object drawn in the intermediate buffer from the intermediate buffer into the frame buffer."

The Office Action asserts that Van Hook discloses that image data that is stored in a general location in main memory for later use by a graphics processor and texture buffer that stores texture image data to be written to a frame buffer. The Office Action also cites col. 9,

¹ Although the Office Action indicates that claims 1-27 are rejected, only claims 1, 3-10, 12-19 and 21-27 are pending.

lines 28-33 and col. 13, lines 53-55, respectively, for support. The Office Action contends that this disclosure anticipates the above-recited features. In particular, the Office Action compares Van Hook's images stored in main memory 300 that can be used later by the graphics processor or frame buffer to the current application's images written to the intermediate buffer and then to the frame buffer.

Although Van Hook stores the image in main memory 300, Van Hook fails to disclose drawing an image within the processor. Van Hook cannot anticipate the claim features because the claims recite that the image is drawn within a processor, more specifically, on an intermediate buffer, and on a frame buffer. That is, Van Hook fails to disclose "an intermediate buffer drawing section which temporarily draws an image of a geometry-processed object in an intermediate buffer in place of drawing the image in a frame buffer; a frame buffer drawing section which draws the image of the geometry-processed object drawn in the intermediate buffer from the intermediate buffer into the frame buffer," as recited in claims 1, 5-8, 10, 14-17, 19 and 23-26.

For at least the foregoing reason, Van Hook fails to anticipate the subject matter of claims 1, 5-8, 10, 14-17, 19 and 23-26, and the claims depending therefrom.

B. Van Hook Does Not Anticipate the Subject Matter of Method Claims 19 and 21-27

Furthermore, Van Hook also fails to disclose additional features found in method claims 19 and 21-27 are method claims. Each of these claims recite "an intermediate buffer drawing section which temporarily draws an image of a geometry-processed object in an intermediate buffer in place of drawing the image in a frame buffer; a frame buffer drawing section which draws the image of the geometry-processed object drawn in the intermediate buffer from the intermediate buffer into the frame buffer."

Van Hook discloses a frame buffer that may be double buffered. Because of the double buffering, part of the frame buffer may serve as an intermediate buffer. However, even if this were the case, the double buffer of Van Hook does not disclose a process where an image is drawn on an intermediate buffer and then that same image is drawn into the frame buffer. This process requires the image to be drawn twice where the frame buffer in Van Hook changes between which side serves as the true frame buffer (col. 9, lines 44-47). Thus, the image is only drawn once. That is, Van Hook fails to disclose or suggest drawing the image of a geometry-processed object drawn in the intermediate buffer into the frame buffer, as recited in independent claims 19 and 23-26.

Additionally, according to the recited claim language, the image is to initially be drawn on an intermediate buffer instead of a frame buffer. In Van Hook, the double buffer is a frame buffer, and so even though it may be double buffered, it is literally a frame buffer. The claims are distinguished from Van Hook because the claims recite that the image is drawn on an intermediate buffer, instead of a frame buffer as disclosed by Van Hook.

For this additional reason, Van Hook also fails to anticipate the subject matter of claims 19 and 23-27.

C. **Van Hook Does Not Anticipate Dependent Claims 9, 18 and 27**

The Office Action rejects dependent claims 9, 18 and 27 stating "where image data may be provided directly to a display processor for an unspecified frame which may be an (N+1)-th frame with a K-th object, or image data may be provided to a display processor for intermediate buffering for an unspecified frame which may be an N-th frame with an L-th object." The Office Action cites col. 9, lines 15-20 for support.

In rejecting claims 9, 18 and 27 with an "or" statement, the Office Action fails to recognize the significance of the language requiring both the K-th object and the L-th object

in the intermediate buffer where the L-th object is drawn at a different frame than the K-th object.

For clarity, claims 9, 18 and 27 are herein amended to recite "wherein when images of plural geometry-processed objects are drawn in the intermediate buffer, the intermediate buffer drawing section draws an image of a K-th object in the intermediate buffer at a N-th frame and draws an image of a L-th object in the intermediate buffer at a (N+1)-th frame without drawing a new~~the~~ image of the K-th object in the intermediate buffer."

For this additional reason, Van Hook also fails to anticipate the subject matter of claims 9, 18 and 27.

II. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of the pending claims are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



James A. Oliff
Registration No. 27,075

Linda M. Saltiel
Registration No. 51,122

JAO:LMS/eks

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OLIFF & BERRIDGE, PLC
P.O. Box 19928
Alexandria, Virginia 22320
Telephone: (703) 836-6400

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